

**Listing of the claims:**

1. (Previously Presented) A method to derive quantitative information from an x-ray image in a network environment comprising:
  - providing a digitized x-ray image on a local computer, wherein the x-ray image includes an image of bone;
  - transmitting the x-ray image to a remote computer; and
  - analyzing the x-ray image at the remote computer, thereby deriving quantitative information on trabecular bone structure from the x-ray image, wherein said information is selected from the group consisting of trabecular thickness and two-dimensional or three-dimensional spaces between trabeculae.
2. (Original) The method of claim 1, wherein the analysis of the x-ray image comprises using a computer program on the remote computer.
3. (Previously Presented) The method of claim 1, wherein said quantitative information includes densitometric information.
4. (Original) The method of claim 3, wherein said densitometric information is bone mineral density.
- 5-7. (Cancelled)
8. (Previously Presented) The method of claim 1, wherein said quantitative information includes information on the morphology of the bone.
9. (Original) The method of claim 8, wherein said information on the morphology of a structure is information on the two-dimensional arrangement of individual components forming said structure.

10. (Original) The method of claim 8, wherein said information on the morphology of a structure is information on the three-dimensional arrangement of individual components forming said structure.
11. (Cancelled)
12. (Previously Presented) The method of claim 1, wherein said information includes two-dimensional or three-dimensional architecture of the trabecular network.
13. (Original) The method of claim 1, further comprising transmitting x-ray acquisition parameters to the remote computer.
14. (Original) The method of claim 13, wherein the x-ray acquisition parameters are transmitted prior to x-ray image.
15. (Original) The method of claim 13, wherein the x-ray acquisition parameters are transmitted simultaneously with the x-ray image.
16. (Original) The method of claim 13, wherein the x-ray acquisition parameters are transmitted after to the x-ray image.
17. (Original) The method of claim 13, wherein the x-ray acquisition parameters are selected from the group consisting of x-ray tube voltage, x-ray energy, x-ray tube current, film-focus distance, object-film distance, x-ray collimation, focal spot size, spatial resolution of the x-ray system, filter technique, and film-focus distance.
18. (Original) The method of claim 1, wherein the x-ray image further comprises one or more internal standards.

19. (Original) The method of claim 18, wherein the internal standard is density of a tissue of a human or air surrounding a structure.
20. (Original) The method of claim 19, wherein the internal standard is density of a tissue and the tissue is selected from the group consisting of subcutaneous fat, bone and muscle.
21. (Original) The method of claim 1, wherein the information is encrypted prior to transmission.
22. (Original) The method of claim 1, further comprising generating a diagnostic report based on the quantitative information.
23. (Original) The method of claim 22, wherein said diagnostic report provides information on a patient's state of health.
24. (Original) The method of claim 23, wherein the state of health is selected from the group consisting of bone mineral density status and fracture risk.
25. (Original) The method of claim 23, further comprising generating a bill for the diagnostic report.
26. (Original) The method of claim 25, wherein the bill is generated by a computer program on the remote computer.
27. (Original) The method of claim 1, wherein the x-ray image is an x-ray film.
28. (Original) The method of claim 27, wherein the x-ray film image is digitized.

29. (Original) The method of claim 28, wherein the film is digitized using a scanning unit.

30. (Previously Presented) The method of claim 1, wherein said x-ray image is acquired digitally.

31. (Previously Presented) The method of claim 30, wherein the digital x-ray image is acquired using a selenium detector system or a silicon detector system.

32-47 (Cancelled)

48. (Original) A method of diagnosing osteoporosis comprising analyzing an x-ray obtained by the method of claim 1.

49. (Original) A method of treating osteoporosis comprising diagnosing osteoporosis according to the method of claim 48 and administering a suitable treatment.

50. (Original) The method of claim 49, wherein the treatment comprises administering an anti-resorptive agent or an anabolic agent.

51. (Previously Presented) The method of claim 1, wherein the quantitative information is structural information.

52. (Previously Presented) The method of claim 51, further comprising analyzing the x-ray image at the remote computer to derive densitometric information on bone from the x-ray image.

53. (Previously Presented) A method of diagnosing osteoporosis comprising analyzing an x-ray obtained by the method of claim 51.

54. (Previously Presented) A method of treating osteoporosis comprising diagnosing osteoporosis according to the method of claim 53 and administering a suitable treatment.

55. (Previously Presented) The method of claim 54, wherein the treatment comprises administering an anti-resorptive agent or an anabolic agent.